



# A FUTURE WITH 3D ENGINEERING AND AUGMENTED REALITY

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# PREFACE

- The information in these slides is intended to be conceptual and doesn't necessarily represent technology as it exists today
- The content doesn't necessarily represent any specific tools, software, or projects unless otherwise specified

# WHY?

# ENGINEERING OF YESTERDAY





# EXPERIENCE





# THE BENEFIT OF AUGMENTED REALITY



# CURRENT CAPABILITIES OF AUGMENTED REALITY



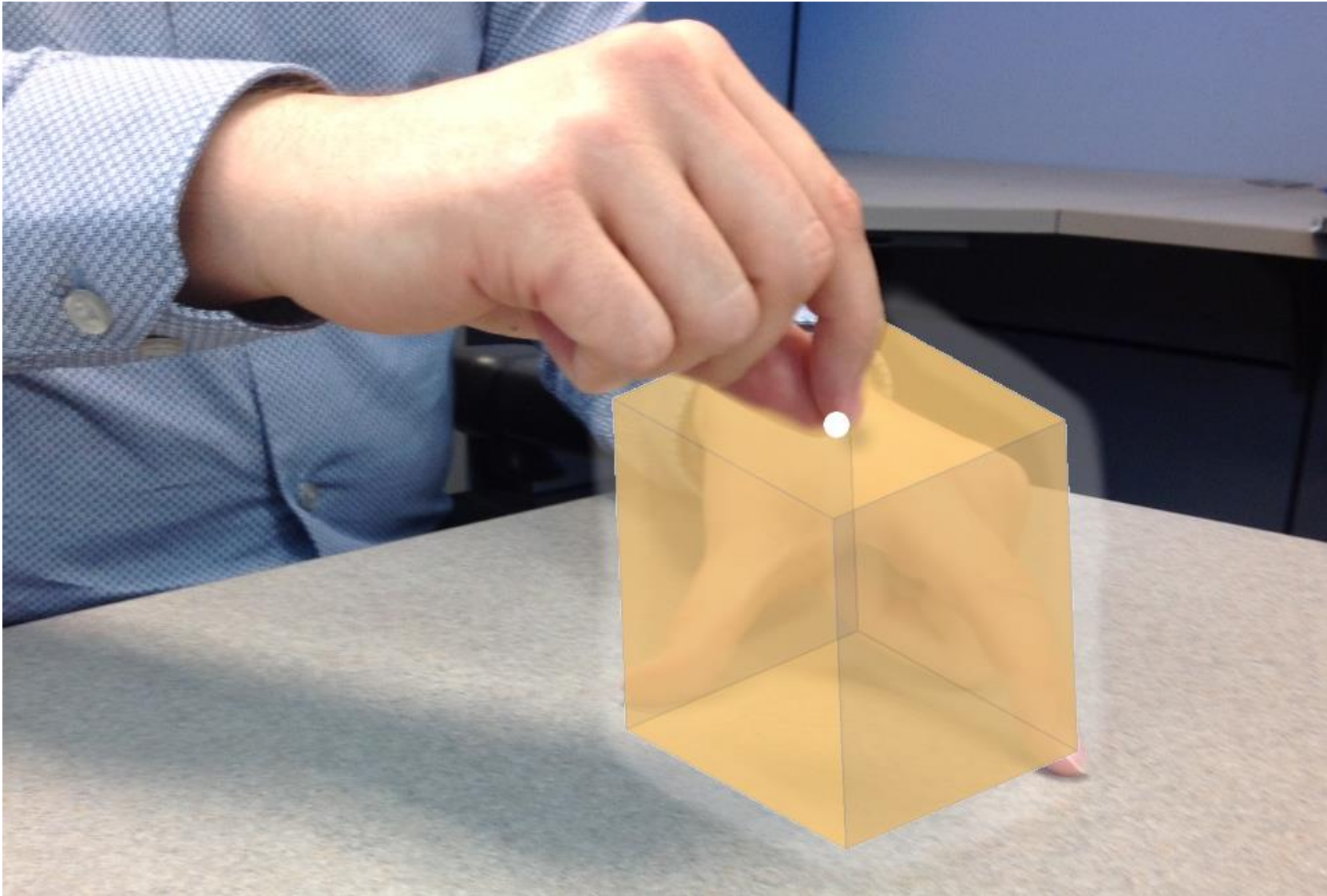


# VISUALIZE





# CONCEPTUAL DESIGN

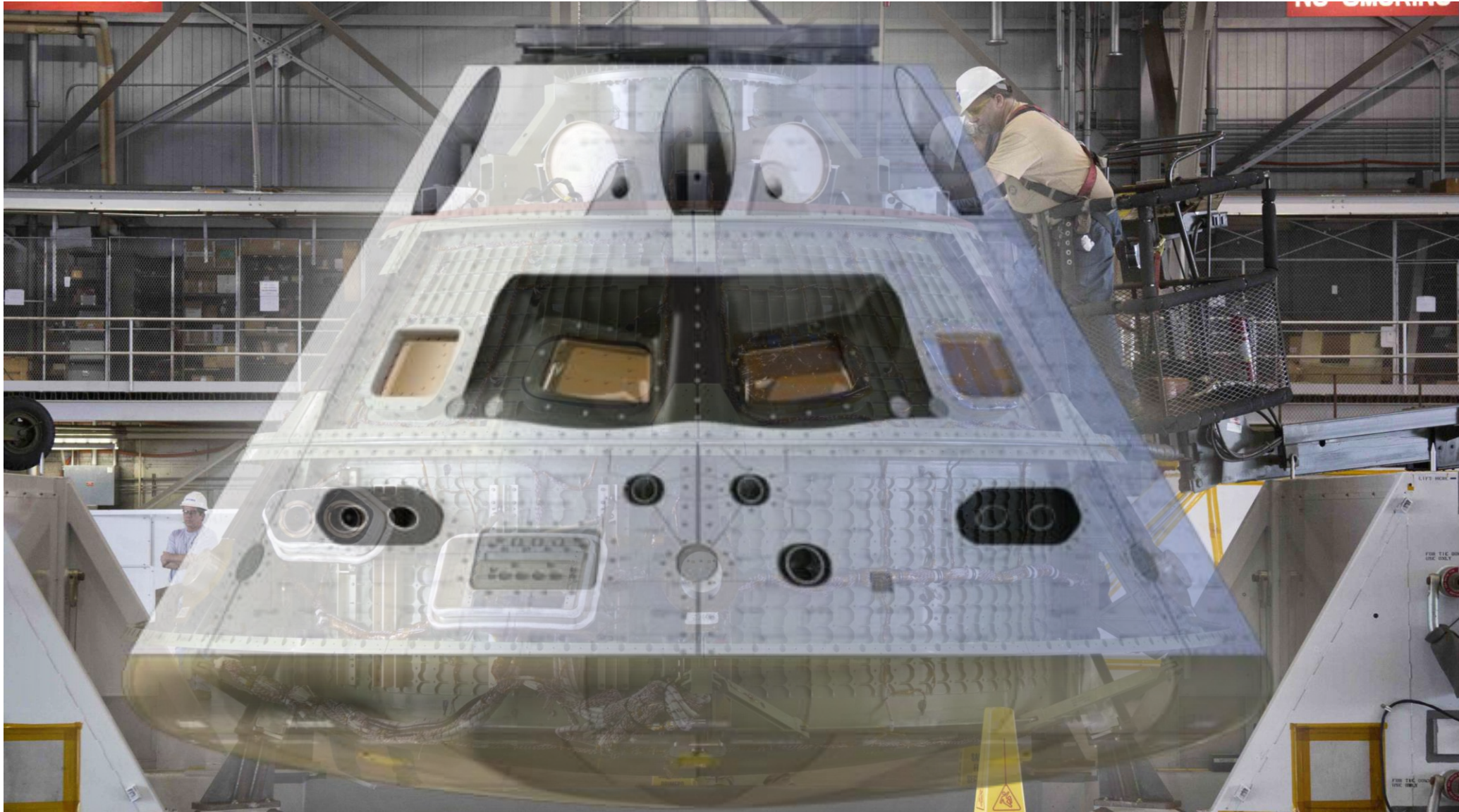


# USER EXPERIENCE



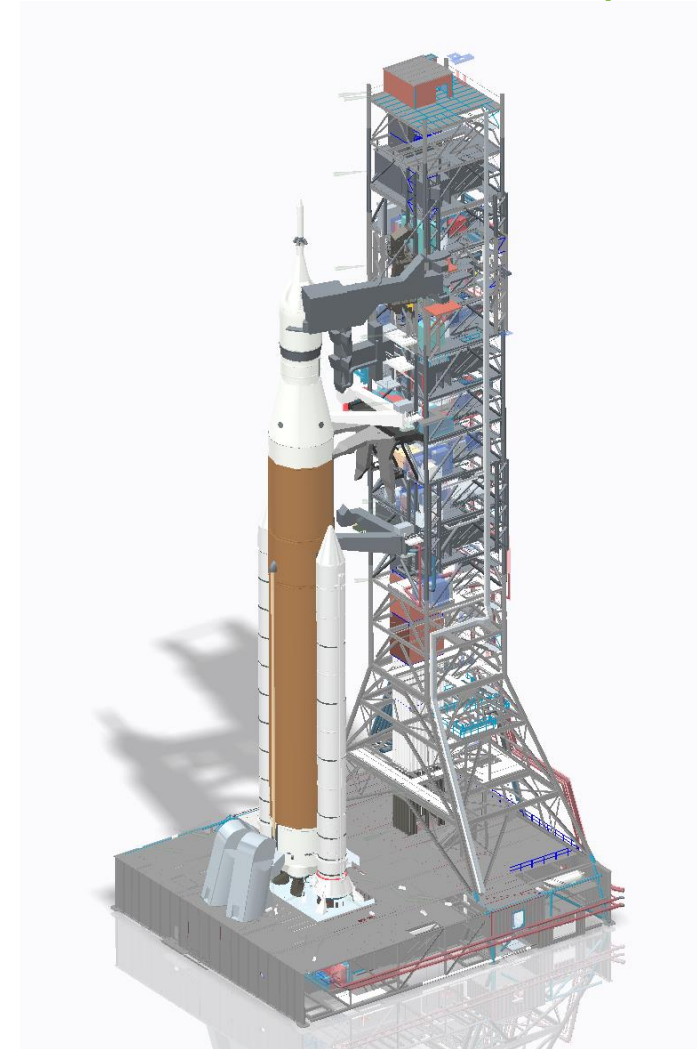


# OBJECT RECOGNITION





# ADVANCED DESIGN



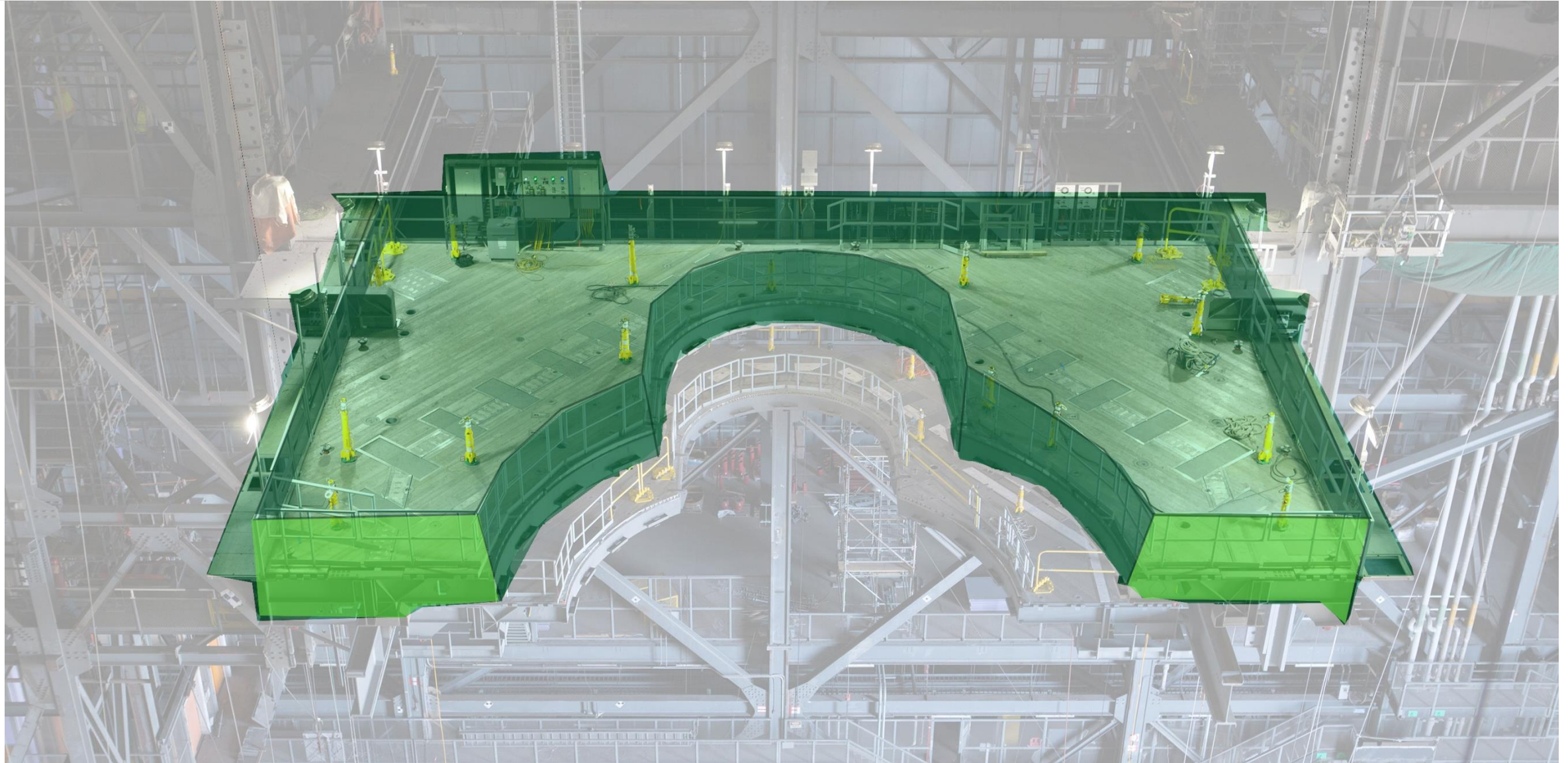


# REMOTE ENGINEERING



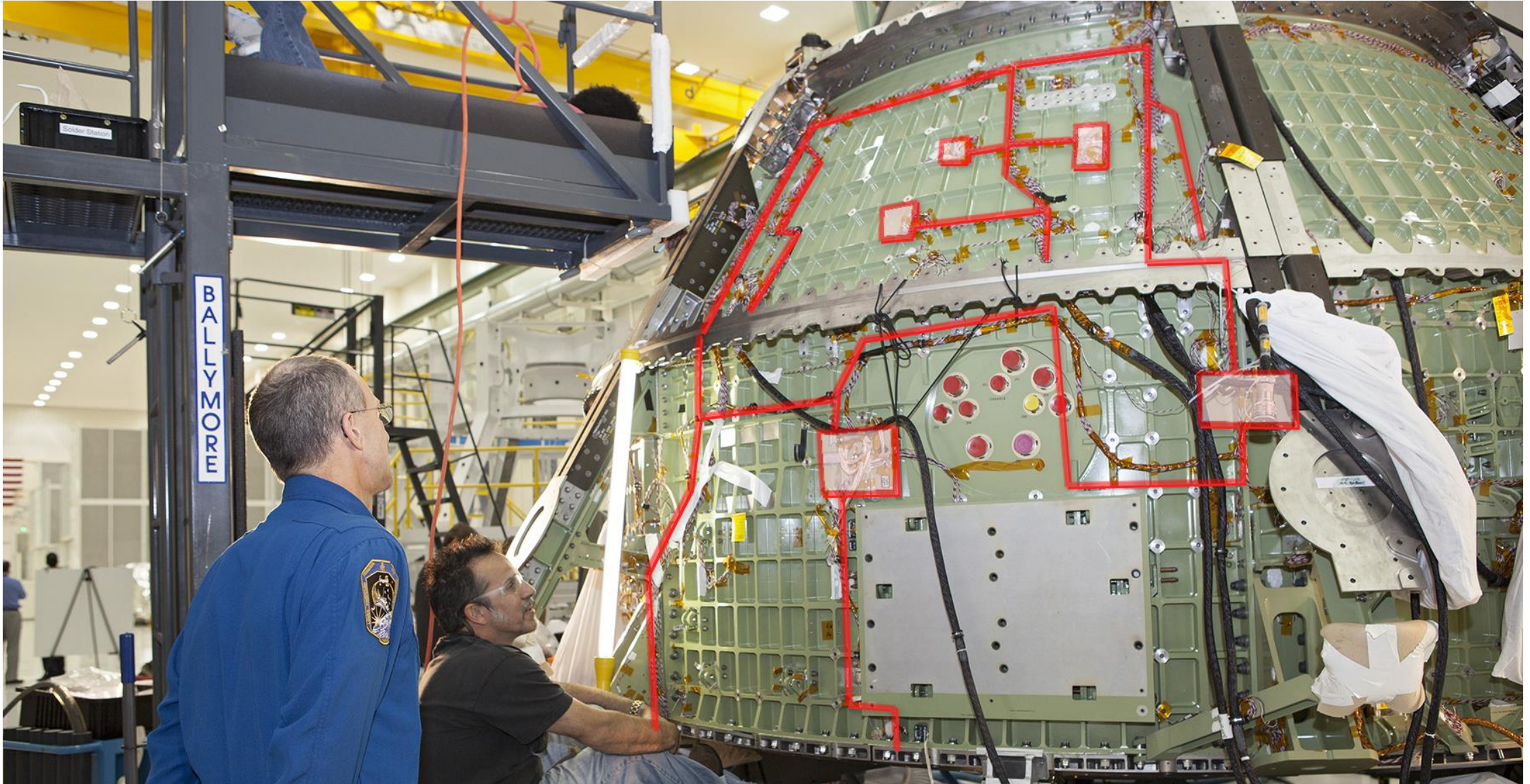


# 3D CAPTURE AND COMPARE





# 2D TO 3D COMPARISON



Decorative geometric shapes in the background: a large pink triangle pointing down-left, a blue triangle pointing down-left, a small yellow triangle pointing down-right, and a green triangle pointing down-left.

# EXISTING PROJECTS PAVING THE WAY AHEAD



# PROJECT SIDEKICK



<http://opslab.jpl.nasa.gov/>

# INNOVATIVE DISPLAY AND ENVIRONMENTAL AWARENESS SYSTEM (IDEAS)



<http://www.nasa.gov/content/ideas-to-enhance-operations-on-earth-and-in-space>



# GSDO APP



<http://www.nasa.gov/externalflash/3DV/>

- Seek use cases
- Push for improvement
- Start exploring
- If it doesn't exist, make it exist



The background features several colorful geometric shapes. On the right side, there is a large, multi-colored starburst or fan-like shape composed of various triangles in shades of blue, green, yellow, orange, pink, and purple. Scattered across the white background are several thin, elongated triangular shapes in blue, pink, orange, and green, some pointing towards the central text.

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